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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/555,715	10/30/2006	Jason Bregmen	016989-000002	9733
30565 7590 07/09/2009 WOODARD, EMHARDT, MORIARTY, MCNETT & HENRY LLP 111 MONUMENT CIRCLE, SUITE 3700 INDIANAPOLIS, IN 46204-5137				
EXAMINER VERAA, CHRISTOPHER				
ART UNIT 3611		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/555,715

**Applicant(s)**

BREGMEN ET AL.

**Examiner**

CHRISTOPHER E. VERA

**Art Unit**

3611

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 28-31, 33, 34, 36, 37, 39-42 and 45-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28-31, 33, 34, 36, 37, 39-42 and 45-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Double Patenting***

Applicant is advised that should claim 50 be found allowable, claim 51 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### ***Claim Objections***

Claim 53 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claim limitations are already fully recited in claim 28, upon which the claim depends.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claims 50, 51, 52, and 56 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.** The claim(s)

contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claims 5 and 51, the applicant indicates that the new claims are supported by cancelled claim 32 and paragraph [0010] of the specification. These parts of the original disclosure describe the grills as being made from a non-reflective material, not the enclosure. The new claims are therefore not supported by the original disclosure and comprise new matter.

As to claim 52, the applicant indicates that the new claim is supported by paragraphs 33 and 35 of the specification. No such support is found for the new claim limitations, i.e. that three strips are visible in a single gap at one time, and the claim therefore comprises new matter.

As to claim 56, the claim presents new matter when it recites that "at least one strip of an installed interlaced image and at least part of an adjacent strip can be viewed by a viewer through each gap at any one time". There is no support for these limitations in the original disclosure.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 28-31, 33, 34, 36, 37, 39-42, 45-55, and 57 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

In claims 28, 53 and 57, the recited ratio of "about 80:20" (claim 28, line 11) is indefinite since the relative degree provided by the term "about" is ambiguous. Furthermore, in claims 28 and 57, the term "variance of up to 5%" is indefinite since the term is not adequately defined and several valid interpretations are available which each give quite different results. For example, one could assume that 80 and 20 in the nominal ratio are percentages and that each will vary by 5, thus making the claimed range "about 75:25 to about 85:15", or 3 to 5.6667. On the other hand, one could assume that the ratio itself varies by 5%, i.e. the ratio 80:20 is equal to 4. 4 plus or minus 5% gives a range of 3.8 to 4.2. Alternatively, one could assume that the dimensions of each grill and each gap varies by 5% where the variance in the grill:gap ratio would then depend on the dimensions chosen. For the preferred case described in the specification on page 2, lines 29-31, the nominal dimensions of 20.32 mm and 5.08mm (which give a nominal ratio of 4), if varied by 5%, would yield grill:gap ratios that can range from 3.619 to 4.421. The claimed ratio cannot be determined and the claim is therefore indefinite.

As to claim 55, the term "other viewing media" renders the claim indefinite since the scope of the claim is excessively broad and the examiner cannot determine what embodiments would be encompassed by such a recitation.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 28-31, 33-37, 42, 43, 46, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gundlach (US-5966105).**

As to claims 28, 29 and 53, Gundlach teaches an enclosure, a frame with an interlaced image 20a, and an optical barrier comprising grills 22. Gundlach does not explicitly teach a grill to gap ratio of 80:20. Gundlach does teach that the dimensions of the grills and gaps are a matter of design choice (Gundlach, column 5, lines 54-61). The teachings of Gundlach demonstrate that the properties and design variables of an optical barrier are sufficiently understood so as to make the results of any ratio predictable to one of ordinary skill in the art. It would have been obvious to construct an optical barrier with a 80:20 grill to gap ratio since the mere optimization of dimensions is within the skill of one of ordinary skill in the art.

As to claims 30 and 31, Gundlach teaches (see figure 6) applying the image to a single piece of transparent material 23. (Gundlach, column 8, lines 10-18)

As to claims 33 and 34, Gundlach teaches grills having circular segment cross-sections with a curved face where the vertex of grills is the smallest distance between the image and the grills.

As to claims 36 and 37, the grills are arranged in a vertically oriented linear array with a gap between adjacent grills.

As to claims 39-41, the claimed dimensions would have been obvious to one of ordinary skill in the art since the mere optimization of dimensions is within the skill of one of ordinary skill in the art.

As to claim 42, the enclosure is adapted to house fluorescent lights sources (column 7, lines 15-17).

As to claim 46 and 47, Gundlach teaches that the relative position of the image frame and optical barrier is adjustable (column 6, line 5) by adjusting the angle, or tilting, the louvers of the optical barrier.

As to claim 48, Gundlach teaches an embodiment (figure 2) where the grill is formed from louvers 44 with viewing slits 41. The slits 41 are air gaps.

As to claims 49 and 57, Gundlach teaches that the grills are optically opaque.

As to claims 50 and 51, Gundlach teaches that the enclosure should be formed from non-reflective, opaque material (Gundlach, column 8, lines 47-63).

As to claim 54, Gundlach teaches that the image may be printed on paper (column 7, lines 35-41). Paper is a flexible material and as such, one of ordinary skill in the art would recognize that the frame must hold the material taut in order to properly align the interlaced image with the optical barrier. The claim is therefore obvious.

As to claim 55, Gundlach teaches printing or projecting the image on a viewing medium.

**Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gundlach (US-5966105) in view of Erbey (US-6476850).** Gundlach lacks teaching

that the distance between the grill and the image is adjustable. Erbey teaches a similar device where the distance between the optical barrier and the interlaced image can be adjusted to allow for a variable viewing distance. It would have been obvious to one of ordinary skill in the art to make this distance adjustable to allow greater flexibility in viewing situations.

### ***Response to Arguments***

Applicant's arguments filed 3/9/09 have been fully considered but they are not persuasive.

The applicant argues that Gundlach does not disclose a grill width to gap width ratio of 80:20 with a variance of up to 5%. The examiner has found this ratio to be obvious as the result of mere optimization of dimensions, as explained above.

The applicant argues that Gundlach does not teach or suggest an apparatus that can display billboard sized images that are perceived as 3D by a viewer, without the use of lenticular lenses and similar optical elements. Not only are these functional requirements not recited in any of the claims, Gundlach teaches an embodiment of his invention as a billboard-sized display that does not include lenticular lenses (see figure 5).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP



§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER E. VERAA whose telephone number is (571)272-2329. The examiner can normally be reached on Monday through Friday, 8:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on 571-272-6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. E. V./  
Examiner, Art Unit 3611

/Lesley D. Morris/  
Supervisory Patent Examiner, Art Unit 3611